Butterflies of the Palni Hills: a Complementary List

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With a view to supplement the list of butterflies of the Palni Hills made by Evans (1910), the authors explored the entire Palni range at all elevations and at all seasons of the year over a period of ten years. This paper gives a list of 54 new recordings made in the course of the work.

Before we present our fresh data on the butterflies of the Palnis, a few lines on these hills and on the significance of our list may prove useful.

The Palnis (Madurai Dt., S. India) run parallel to and south of the Nilgiris. About 70 miles (110 km.) long and of an average breadth of some 15 miles (24 km.), they abut against the Western Ghats, rising gradually east-west up to a high tableland of 8000 ft. (2400 m.), 30 miles (48 km.) long, with Kodaikanal at 7000 ft. (2100 m.) The variety and abundance of the butterfly fauna of these hills vary obviously with the richness and kinds of vegetation. Without going into details about the latter, we may note in general that while the northern and southern slopes and valleys show great floral or forest luxuriance, the upper plateau west of Kodaikanal consists mainly of grasslands interspersed with some sholas. The eastern lower Palnis up to 4500 ft. (1400 m.) on the other hand cover large cultivated areas of plantains, oranges, lemon, coffee, cardamom, etc.

Taking this into account, we mention below a few places of particular interest to butterfly collectors:

- (1) The Tope, 1000 ft., (300 m.) and Vengayaparai, 2300 ft. (700 m.) at the 5th and 8th mile respectively of the 'Old Coolie Road' from Peryakulam Town to Kodaikanal;
- (2) Thalayar Falls, 3000 ft. (900 m.), facing the 8th mile of the Motor Road, which links Kodaikanal Hill Station to the Kodaikanal Road-Peryakulam highway;
- (3) Perumal-Neutral Saddle, 5000 ft. (1515 m.), and Sacred Heart College, Shembaganur, 6000 ft. (1820 m.), at the 23rd and 27th mile on the Motor Road respectively;

- (4) Palar Dam, 4000 ft. (1210 m.), on the 7th-12th mile of the Coolie Path from Neutral Saddle to Palni Town;
- (5) Porandalar Valley, 3500 ft. (1160 m.), below Palanghi village;
- (6) Manalur, 3300 ft. (1000 m.), in the Lower Palnis;
- (7) Manjampatti-Tallungi 2200 ft. (670 m.), some 7 to 12 miles (11km. to 19 km.) up the Amaravati Dam.

Since Evans listed the butterfly fauna of the Palnis in 1910, little has been done as far as we are aware to confirm and complete his findings in this region. The advisability of a fresh survey was suggested by his own statement, in his article on the Palni Butterflies, that probably 'another 100 species' could easily be added to his recordings. It is this which impelled us, as permanent residents of these hills, to start working on our 'Complementary List'. As we were working on Evans's List of Palni Butterflies we have followed his nomenclature.

Whereas Evans collected mainly at the Tope or around Kodaikanal and this too for only 6 weeks (end of Aug. to early Oct.) supplementing his findings from other reliable sources, we have tried to explore the entire Palni Range, at all elevations and seasons of the year, over a period of some 10 years. While covering all the Palnis, however, our List lays a heavy emphasis on the Tope-Vengayaparai region; for any one familiar with these hills will agree that this region, as Evans has also pointed out, still gives the best yield in both varieties and numbers of butterflies.

Our study has been carried out mostly with the help of the clerical (Jesuit) students of Sacred Heart College, Shembaganur. But we must also gratefully mention the valuable collaboration of the boys of High-clere School, Kodaikanal, and of Mr. Alan Sharman of Madras.

Thanks to these combined efforts, we have been able to gather over 250 kinds of Heterocera and 228 species of Rhopalocera. Taking only the latter into account, we would like to note the following with reference to Evans (1910):

- (a) Our observations confirm 174 of Evans (1910) recordings; though occasionally with not a few divergent data regarding location, elevation, and seasonal appearance of large numbers;
- (b) We have not as yet recorded 17 of Evans's listing in 1910. Of these, three appear on all accounts to belong to the Palnis, namely *Telicota concinna*, *Telicota gola*, and *Castalius ananda*. As for the remaining 14, recent taxonomic regroupings and modifications in nomenclature make it extremely difficult to say anything definite;
- (c) The few discrepancies between our findings and those of Evans may, to a large extent, be explained by the fact that the Palnis are not quite the same today as Evans knew them 50 years ago. For with ruthless cutting down of forests, species once apparently abundant have now become quite rare, not to say extinct;

(d) In spite of this deforestation, our survey has given us 54 new records, not as yet the 100 predicted by Evans! They are listed below, but it would be difficult in some cases to state exactly whether we are dealing with permanent or only migratory forms of the Palnis.

LIST OF NEW RECORDS

HESPERIIDAE

1. Astycus pythias lanka Evans

Two at Vengayaparai in Sept.-Oct. One at the 7½ mile of the Coolie Road in July.

2. Baoris conjuncta narooa (Moore)

Several at all elevations.

3. Baoris guttatus bada (Moore)

Two at Palar Dam in Feb.

4. Bibasis sena (Moore)

Three at Vengayaparai, one at the Tope in Feb., one at the 7½ mile of the Coolie Road in Nov.

5. Caprona ransonnetti lanka Evans

Common at lower elevations all through the year, more abundant at higher elevations in Feb.-Mar.

6. Caprona ransonnetti taylorii (de Nicéville)

At lower elevations all through the year, especially at Vengayaparai.

7. Daimio bhagava bhagava (Moore)

One at Porandalar Valley in July.

8. Gangara thyrsis thyrsis (Fabricius)

One taken by Highelere students, one mile above the Palar Dam site in May.

9. Hasora taminatus taminatus Hübner

Not rare at Vengayaparai and at higher elevations in Aug.-Sept. A few stray ones may be taken at higher elevations in Nov.

10. Ismene jaina fergussoni de Nicéville

One at Vengayaparai along the stream in Nov. One & caught and another & seen by Mr. Sharman by the tope stream in March.

11. Matapa aria (Moore)

Not rare at higher elevations in July-Oct,

12. Padraona cato Evans

Common at Vengayaparai in Aug.-Sept.

LYCAENIDAE

13. Amblypodia amantes amantes Hewitson

Several along the stream from the Tope to Vengayaparai at all seasons, chiefly Aug.-Feb.

14. Amblypodia centaurus pirama (Moore)

Less common than *amantes*, though found in the same locality. A \mathcal{P} was taken by Mr. Sharman at the Tope stream in May also, four \mathcal{P} and three \mathcal{P} in July and many others both sexes seen.

15. Bindahara phocides moorei Frühstorfer

One \Im and one \Im at the $7\frac{1}{2}$ mile of the Coolie Path along the stream at Palar Dam in July. Two \Im were taken by Mr. Sharman at the Tope stream in March; also, one \Im seen at Vengayaparai in July. One \Im at milestone 5/2 of the Motor Road in July.

16. Charana jalindra (Horsfield)

One of at Shembaganur in Jan.

17. Deudoryx epijarbas (Moore)

Two $\mathcal{J}\mathcal{J}$ taken at mile 6 and $7\frac{1}{2}$ of the Old Coolie Road, along the stream, in Sept.

18. Everes parrhasius (Fabricius)

Common at all elevations all the year round.

19. Horaga onyx (Moore)

One in Sacred Heart College Museum, Shembaganur, but without exact records as to its location and season.

20. Iraota timoleon arsaces Frühstorfer

Several $\mathcal{J}\mathcal{J}$ and $\mathcal{L}\mathcal{L}$ were taken at $\mathcal{L}\mathcal{L}$ mile of the Old Coolie Road, along the stream, in Sept. and May. Five $\mathcal{L}\mathcal{L}$ taken by Mr. Sharman along the Tope stream in May; also, one $\mathcal{L}\mathcal{L}$ and three $\mathcal{L}\mathcal{L}$ in July and several both sexes seen.

21. Nacaduba beroe gythion Frühstorfer

Two at Vengayaparai stream in Sept.

22. Nacaduba dubiosa indica Evans

Common along the stream from the Tope to Vengayaparai all through the year.

23. Nacaduba helicon viola (Moore)

Three \mathcal{J} \mathcal{J} and two \mathcal{L} at Vengayaparai in Aug.-Sept. and Apr.-June. One \mathcal{J} at mile 5/2 of the Motor Road in July.

24. Nacaduba hermus nabo Frühstorfer

Two $\nearrow \nearrow$ and two ? ? between the 22nd and 23rd mile of the Motor Road in Oct.

25. Nacaduba kurava canaraica (Moore)

One σ and one φ in the same location as *nabo*.

26. Pratapa deva deva (Moore)

One ♀ in Shembaganur in Dec.

27. Rapala melampus (Cramer)

One of taken by Highelere students at Kodaikanal in Feb.

28. Rapala schistacea (Moore)

Not rare at the Tope stream, the \mathcal{J} being more common. Several \mathcal{J} and \mathcal{L} were taken at mile 5/2 of the Motor Road in July.

29. Spindasis elima elima (Moore)

Two of of taken by Mr. Sharman at the Tope in May.

30. Spindasis ictis ictis (Hewitson)

One of in Sacred Heart College Museum, Shembaganur, but without exact records as to its location and season.

31. Spindasis schistacea (Moore)

Some ♂ ♂ at mile 5/2 (The Temple) of the Coolie Road in Sept. and Feb. One ♂ taken in Shembaganur in Feb.

32. Tajuria cippus cippus (Fabricius)

Several \nearrow and \nearrow at the Tope stream in July. \nearrow were taken a few months later too.

33. Tajuria melastigma de Nicéville

One Q taken at the Tope by Mr. Sharman in May. One by us in July.

34. Tarucus nara (Kollar)

One ♂ and one ♀ at Palar Dam in Oct.

35. Virachola isocrates (Fabricius)

One σ at Manalur in Jan. Two $\mathfrak{P}\mathfrak{P}$ at the Tope and Kodaikanal respectively in Feb.

36. Zesius chrysomallus (Hübner)

Two \$\times \text{ along the stream between the 5th and 6th mile of the Old Coolie Road, in Jan.}

37. Zizeeria trochilus putli (Kollar)

Common at all elevations all through the year.

NYMPHALIDAE

38. Biblia ilythia (Drury)

Given by Evans 1910 for the plains (Peryakulam). One was taken in Shembaganur and another at the Tope in Sept.

39. Cethosia nietneri mahratta Moore

One ♀ at Vengayaparai in June.

40. Doleschallia bisaltide malabarica Frühstorfer

One at Shembaganur in Nov.

41. Euthalia evelina laudabilis Swinhoe

One 3 and one 4 at Vengayaparai and Thalayar Falls respectively, in Sept.-Oct. One 3 at the Tope in July.

42. Euthalia lubentina arasada Frühstorfer

One of taken at Vengayaparai and another along the stream at mile 6 of the Old Coolie Road in Oct. One ♀ seen at mile 19/3 of the Motor Road in Oct.

43. Pantoporia selenophora kanara Evans

One of taken at Kodaikanal in Jan. and another at mile 20 of the Motor Road in March. One ♀ at Neutral Saddle in Sept.

44. Precis atlites (Linnaeus)

Several at Talungi in April.

PAPILIONIDAE

45. Chilasa clytia clytia (Linnaeus)

One of at Neutral Saddle in May and another at Vengayaparai in Oct.

46. Chilasa clytia dissimilis (Linnaeus)

One of taken a mile and a half after Palar Dam in June and another at mile 9 of the Old Coolie Road in Nov.

47. Papilio paris tamilana Moore

Several at Manalur in April. One was taken at Kodaikanal by the students of Highelere in Sept.

48. Pathysa nomius nomius (Esper)

Several at Manjampatti in April and at the foot of Thalayar Falls in Oct.-Nov. A few were taken at the Tope in Oct. and Jan.

PIERIDAE

49. Appias lyncida latifasciata Moore

One $olimits_{\circ}$ at the Tope in Dec. One $olimits_{\circ}$ in Sacred Heart College Museum, but without records as to its location and season.

50. Appias paulina wardii (Moore)

Two $\partial \partial$ and two Q Q at the Tope and Shembaganur in March and Nov. respectively.

51. Catopsilia pomona (Fabricius)

Very common at all elevations all the year round. Abundant in Kodaikanal in Dec.-Jan.

52. Catopsilia pomona var. catilla (Cramer)

Less common than the previous.

53. Huphina nadina remba (Moore)

One of taken and another seen by Mr. Sharman at the Tope in May.

54. Terias andersoni ormistoni Watkins

Common at all elevations all through the year.

REFERENCES

[In addition to the new records from the Palnis mentioned above, Mr. A. J. Sharman adds the following:

HESPERIIDAE

1. Tapena thwaitesi hampsoni Elwes & Edwards.

One of along the Tope stream in July.

LYCAENIDAE

2. Pratapa cleobis (Godart)

One $\mathfrak P$ in the Perumal Reserve Forest in May. [Fr. Ugarte also reports that since the paper was submitted the authors caught one $\mathfrak F$ of this species at the Motor Road milestone 19 in October.]

3. Amblypodia abseus Hewitson

One seen by the Tope stream in July.

-EDS.]